

# Notice of Allowability

Application No.

09/904,558

Examiner

Callie E. Shosho

Applicant(s)

ONISHI ET AL.

Art Unit

1714

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 2/18/04.
2. ☒ The allowed claim(s) is/are 2-12.
3. ☒ The drawings filed on 10 October 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

Callie E. Shosho  
Primary Examiner  
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**Statement of Reasons for Allowance**

1. In the office action mailed 11/18/03, claim 1 was rejected while claims 2-9 were indicated as allowed. It is noted that, as pointed to by applicants on page 5 of the amendment filed 2/18/04, the examiner inadvertently did not indicate claim 10 as allowed. It is clear, as set forth on page 5, first full paragraph and page 6, first full paragraph of the office action mailed 11/18/03, that claim 10 was considered allowed.

In response, in the amendment filed 2/18/04, claim 1 was cancelled.

Thus, present claims 2-12 are allowable over the "closest" prior art Kitayama et al. (U.S. 5,130,113) and Oda et al. (U.S. 4,829,103) for the following reasons.

Kitayama et al. disclose fine particle of aluminum hydroxide comprising (1) aluminum hydroxide having secondary particle size of less than 30  $\mu\text{m}$  corresponding to presently claimed aluminum hydroxide Z and (2) aluminum hydroxide having secondary particle size of 40-100  $\mu\text{m}$  corresponding to presently claimed aluminum hydroxide X. It is disclosed that the aluminum hydroxide Z has BET surface area of 3  $\text{m}^2/\text{g}$  or less. The ratio of aluminum hydroxide Z/aluminum hydroxide X is 1:9 to 9:1. There is further disclosed a cured resin composition for forming artificial marble wherein the composition comprises unsaturated polyester and fine particles of aluminum hydroxide as described above wherein the resin filling viscosity is less than 800 P.

However, there is no disclosure in Kitayama et al. of aluminum hydroxide Y having BET specific surface area of  $1 \text{ m}^2/\text{g}$  or less and secondary particle size of  $10\text{-}35 \text{ }\mu\text{m}$  as required in present claims 2 and 10. That is, while present claims 2 and 10 require ternary composition comprising three types of aluminum hydroxide, Kitayama et al. disclose binary composition comprising two types of aluminum hydroxide.

With respect to present claim 3, it is noted that Kitayama et al. disclose ratio of aluminum hydroxide X to aluminum hydroxide Z of 9:1 to 1:9, which broadly overlaps the presently claimed ratio of aluminum hydroxide X to aluminum hydroxide Z of 80:20 (4:1) to 75:25 (3:1). However, Kitayama et al. do not disclose any criticality with respect to the ratio of aluminum hydroxide X to aluminum hydroxide Z. This is especially significant in light of the comparative data set forth in table 1 of the present specification which compares aluminum hydroxide mixture comprising aluminum hydroxide X (coarse particle) and aluminum hydroxide Z (fine particle) in ratio within the scope of the present claims (example 3 and 4) with aluminum hydroxide mixture comprising aluminum hydroxide X and aluminum hydroxide Z in ratio outside the scope of the present claims but within the scope of Kitayama et al. (comparative examples 7 and 8). It is shown that the presently claimed aluminum hydroxide is superior in terms of viscosity or curing time.

Oda et al. disclose fine particle of aluminum hydroxide comprising (1) aluminum hydroxide having secondary particle size of up to  $100 \text{ }\mu\text{m}$  corresponding to presently claimed aluminum hydroxide Z and (2) aluminum hydroxide having secondary particle size of  $15\text{-}100 \text{ }\mu\text{m}$  corresponding to presently claimed aluminum hydroxide X. The BET surface area of the

mixture of the first and second aluminum hydroxide is less than  $1 \text{ m}^2/\text{g}$ . There is further disclosed a cured resin composition for artificial marble wherein the resin composition comprising unsaturated polyester and fine particles of aluminum hydroxide as described above.

However, there is no disclosure in Oda et al. of aluminum hydroxide Y having BET specific surface area of  $1 \text{ m}^2/\text{g}$  or less and secondary particle size of  $10\text{-}35 \text{ }\mu\text{m}$  as required in present claims 2 and 10. That is, while present claims 2 and 10 require ternary composition comprising three types of aluminum hydroxide, Oda et al. disclose binary composition comprising two types of aluminum hydroxide.

With respect to present claim 3, it is noted that Oda et al. disclose ratio of aluminum hydroxide X to aluminum hydroxide Z is at most 70:30 which falls outside the scope of present claim 3. Additionally, comparative data set forth in Table 1 of the present specification which compares aluminum hydroxide mixture comprising aluminum hydroxide X (coarse particle) and aluminum hydroxide Z (fine particle) in ratio within the scope of the present claims (examples 3 and 4) with aluminum hydroxide mixture comprising aluminum hydroxide X and aluminum hydroxide Z in ratio outside the scope of the present claims but within the scope of Oda et al., i.e. ratio of 70:30 (comparative example 8) shows that the presently claimed aluminum hydroxide is superior in terms of curing time.

Thus, it is clear that Kitayama et al. or Oda et al., either alone or in combination, do not disclose or suggest the present invention.

In light of the above, the present claims are passed to issue.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Callie E. Shosho  
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